

# **NORTH CAROLINA CONSTRUCTION NEWS**

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**NEW FRONTIERS:**

## **Focusing on technology in facilities engineering and design**

**North Carolina's Top 10  
Home Builder Industry  
Leaders for 2018**

**North Carolina's  
Top 10 Safety Report**

## In this issue

**3** **NCDOT Building Code Council rules that siding can go on homes before frames are inspected**

**4** **New frontiers: Focusing on technology in facilities engineering and design**

**8** **Ft. Bragg: More than \$1 billion to be spent for current and planned construction projects through 2024**

**9** **North Carolina's Top 10 Home Builder Industry Leaders for 2018**

**12** **North Carolina's Top 10 Safety Report**

**15** **PROJECTS AND OPPORTUNITIES**

**17** **ASSOCIATION NEWS**

## **NORTH CAROLINA CONSTRUCTION NEWS**

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## Publisher's Viewpoint



Mark Buckshon, publisher

As 2018 turns to 2019, many individuals contemplate where they have been, and where they are going. There are many uncertainties and surprises ahead – anyone who could truly predict the future would have amazing powers – but we can still see some trends, and changes, and know they will be important.

I think the technological revolution will soon truly change the architectural, engineering and construction industry, both creating challenges for some businesses and individuals, and opportunities for others. This industry has been a late-adaptor to technology but everything will soon shift, as enterprises (including outsiders) develop integrated processes that take concepts from drawing to manufacturing and site building, and push them online. (And the buildings will be much smarter than they've ever been.)

Technology will also redefine labor perhaps both causing and curing worker shortages. There'll still be need for site-based contractors and employees, of course, but the trend to modular and prefabricated structures is undeniable, and concepts such as "printing" buildings are past the fantasy stage.

In this issue, we've an article from Raleigh-based consultants FMI that explores some of the opportunities and challenges ahead. I think you should read it carefully and begin thinking about how technology will impact your own business.



As the Christmas Holiday season approaches (some of you will probably read this article in the New Year, I hope you enjoy your break and families, and will start 2019 refreshed and ready for an exciting year ahead. Please let me know if you have story ideas or suggestions. You can reach me at [buckshon@nccconstructionnews.com](mailto:buckshon@nccconstructionnews.com).

# NCDOL Building Code Council rules that siding can go on homes before frames are inspected

North Carolina Construction News staff writer

Should contractors be allowed to install siding on homes before the framed structures are checked by building inspectors?

The case reached the North Carolina Department of Insurance (NCDOL) Building Code Council in Raleigh, where the state's top building code authority ruled that, indeed, the siding can go on before the inspection – even if this may pose risks in high-wind areas.

Port City Daily reported on the case in a recent article, describing how Robert Privott, a consultant and lobbyist for the North Carolina Home Builders Association (NCHBA), appealed an earlier decision by the NCDOL that stemmed, he argued, from an unclear building code.

"Privott had initially asked for clarification earlier in the year," the newspaper reported.

The code in question (Section 107.1.5) covers when a contractor must have a house's frame inspected, but it doesn't specify whether or not the house's exterior siding can be installed or not. The code included commentary – not an official ordinance but supplemental language that helps clarify the code, suggested the inspection should come first – but it was removed in 2016.

According to email records supplied by the North Carolina Department of Justice (DOJ), in March, Privott was informed by Clifford Isaac, the deputy commissioner for NCDOL's engineering division, that – without the commentary – there was no reason contractors would have to wait for an inspection before installing exterior walls.

Privott, stating that different jurisdictions around the state were enforcing the code differently, asked Barry Gupton, a member of the state's building code council and the chief code consultant, for a formal interpretation, the newspaper reported.

Gupton reversed Isaac's decision, telling Privott frame inspection had to come first.

Privott requested an appeal from the NCDOL building code council and made his case on Oct. 31, joined by Dan Tingen, the former chairman of the building code council from 2003 to 2017, who testified on Privott's behalf. Assistant Attorney General Heather Freeman made the case for the state, asking the board to uphold Gupton's decision.

According to an audio recording of the meeting, provided to the newspaper by the North Carolina Department of Justice, much of the appeal case came down to whether installing veneers or exterior siding would interfere with an inspectors ability to accurately gauge whether the building frame was up to code. Gupton suggested it would.

Freeman asked Tingen: "In your professional experience — you don't think it's necessary for inspectors to view items or framing that are covered by siding?"



Tingen pointed out there are "numerous parts of the house not visible unless you're there when they're built."

Freeman responded that there are other jurisdictions that do not allow siding to be installed before framing inspections.

Tingen answered, "Correct. And I think they're in error for doing so."

Freeman later asked Gupton if he had any concerns over Privott's request. Gupton said he did.

"More concern is in some parts of the state more than in others," he said, adding that his concerns had to do with the bracing of building frames, specifically in high-wind areas of the state where sub-code frames could collapse during storms.

Gupton noted that the building code did not differentiate between high-wind and other areas.

The council weighed both sides: Inspectors' need for visual access to the entire frame, unobscured by siding, and the potential safety hazard presented by sub-code frames in high-wind areas. On the other side: the need for contractors to move construction along at a reasonable pace, as well as the concern for leaving the frame exposed to the elements for an undue amount of time.

The council ultimately decided in favor of Privott and the NCHBA.

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# NEW FRONTIERS: Focusing on technology in facilities engineering and design

By Russell Clarke and Greg Powell  
Special to North Carolina Construction News

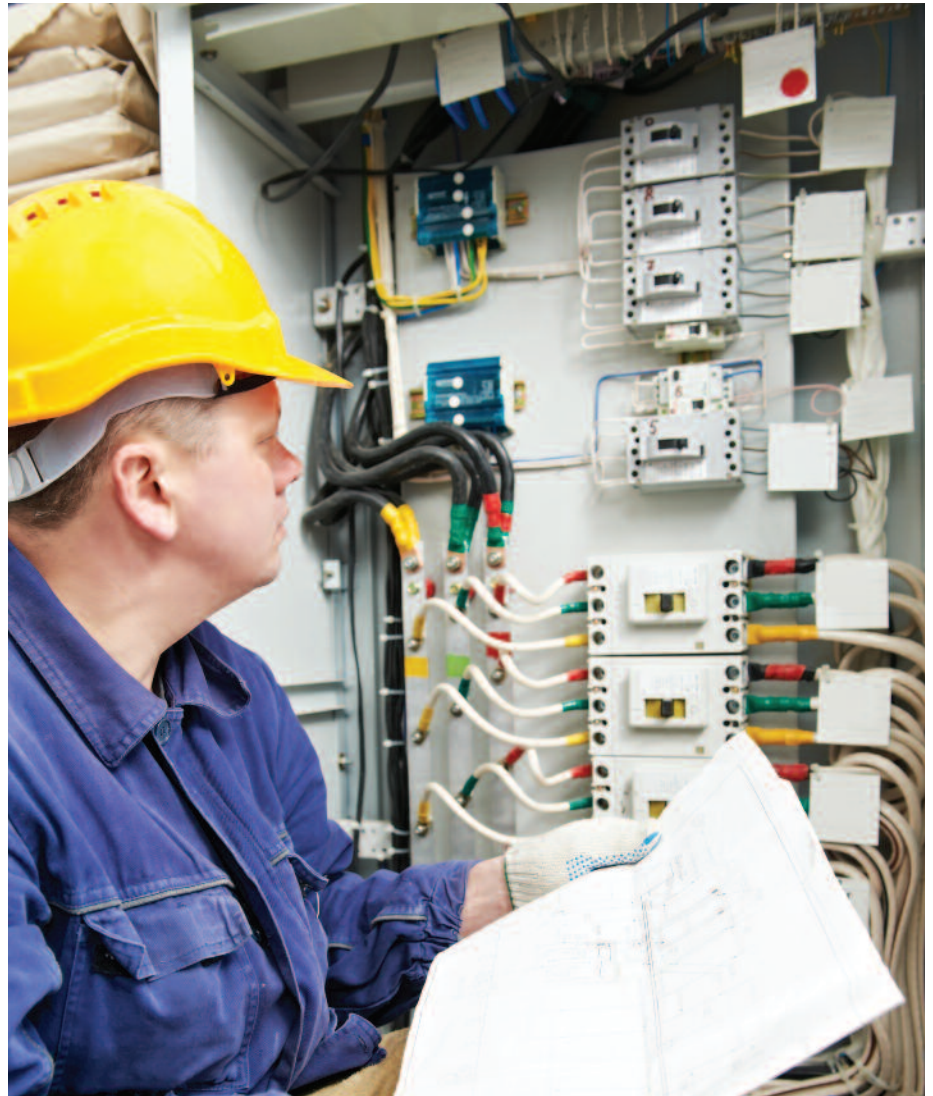
The continued infiltration of technology into our daily lives has brought with it advanced capabilities, new efficiencies and greater connectivity on many different levels. It has also brought headaches along the way. This same dynamic (of technology advances causing heightened expectations and complexity) is occurring in today's facilities and buildings industry—driving the need for skilled technology-focused engineers to design, integrate, maintain and maximize the increasingly complex, integrated and connected systems.

Technology design and system integration expertise is developing into a prerequisite for engineering firms focused on vertical buildings, allowing firms with strong system integration skill sets and user-friendly analytical tools to capture a growing market need.

Key benefits accrue to those firms that can extend their technological expertise and capabilities across a broader range of the facility project life cycle—spanning the upfront design, systems integration and ongoing technical service needs. This depth of expertise positions the provider as the first call for new projects, as well as the trusted advisor for future facility needs.

## What Is driving the change?

Simply put, today's buildings are more complex and sophisticated than in the past, and people have higher expectations from their buildings. No longer are well-functioning HVAC systems, smart lighting, strong Wi-Fi, video-enabled meeting rooms and classrooms, and easy controls things that building stakeholders want—these are now things



they have come to expect. New buildings are designed and built with the latest technology systems, and owners are retrofitting older building stock with new technologies. These systems have made significant strides from those even five years ago, and now stakeholders expect them to interact and function seamlessly as one.

Analysts predict there will be over 25 billion connected things in use in 2020, a major increase from the 4.9 billion in 2015. Sensors and systems

are interacting to deliver optimal temperature, air quality, lighting levels and security. As these traditionally separate systems are integrated and controlled as one, the ability to enable effective interaction is more critical than ever before.

Garry Montgomery, vice-president and head of technology at Dynamix Engineering, states, "It is also the most rapidly changing building system. Technology systems impact workflow, efficiency, expectations, safety, communication, connectivity

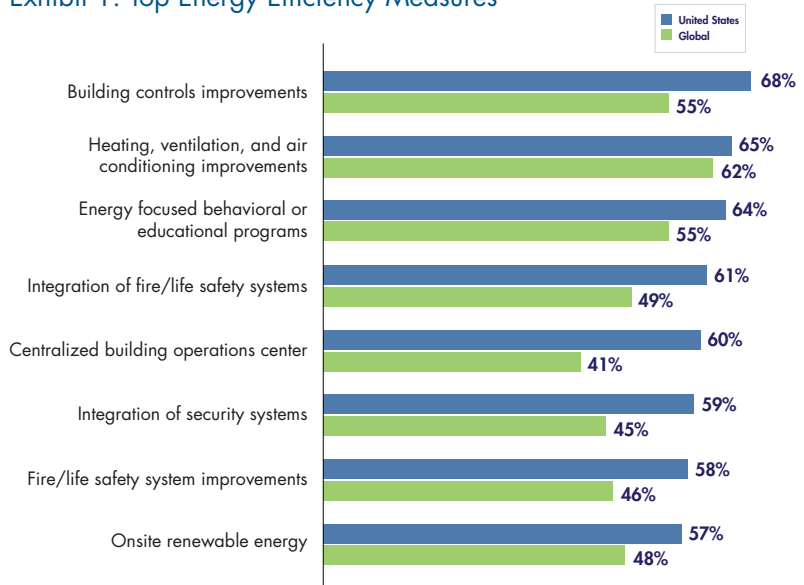
and so many other things.”

The skill set needed to design and then blend multiple systems to function as intended is most valuable. Without the proper integration of open protocol systems, buildings will remain stuck in decades past, even despite having the most up-to-date “smart” systems. Additionally, engineering firms with a product-agnostic stance and flexible capabilities can best allow the integration to take precedent over the product. Facility stakeholders can therefore achieve the goal of smooth and proper functionality—all without being reliant on one brand name, proprietary system or specialty service provider.

Roles of service providers are continuing to blend as facilities become smarter and more connected. The blending of these roles further drives the need for someone that can “make sense of it all” and bring the many moving (and traditionally independent roles) together to work as one. No longer does only the facilities manager control the building. The roles of HVAC service companies, electricians and facility service providers are all evolving as well, with each entity relying on data-driven, connected systems. In many cases, facility managers act as the boots on the ground but don’t necessarily know how to utilize the data and analytics. Engineering firms with these technology and analytical capabilities can help with both proactive and reactive systems management and optimization.

These firms bring significant value by analyzing systems data to

### Exhibit 1. Top Energy Efficiency Measures



Source: “2018 Energy Efficiency Indicator Survey. United States.” Johnson Controls. 2018.

### Opportunity abounds

The market is demanding increased technology capabilities across all facility service providers, but the landscape of skilled providers as well as the underlying talent base remains fragmented. Firms that recognize, develop and prioritize expertise in the initial design of technology systems, system integration and ongoing technical services are likely to benefit significantly. Capitalizing on this opportunity has greatly benefited early movers in the industry and may benefit many additional firms as technologies continue to advance and become further embedded in today’s facilities.

plan for maintenance activities and direct the boots on the ground to correct problems as they arise. This solution relies on technologically sophisticated engineers who can design, internalize and leverage systems data through remote monitoring. As this capability becomes more widespread, the value that these outside providers bring to on-

site facility and IT managers will continue to grow.

### What are the skill sets?

The ability to bring fully functioning systems, simplicity and actionable insights to end users requires a unique blend of skill sets. These skill sets span the facility life cycle from initial technology design to integra-



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tion expertise and remote monitoring of building systems.

### **Initial design for technology-focused systems**

Designing the data, voice, video, network, energy management, security and similar systems is a growing skill set and key differentiator for design engineering firms working on large vertical building projects. The ability to sell these services separately from more traditional MEP engineering services also provides inroads into new projects at an earlier phase, where the technology component of the project can lead to an expanded role and future work.

Montgomery sums up the point, "Technology engineering is now the fourth utility in an industry traditionally based around three (mechanical, electrical and plumbing). It is also the most rapidly changing building system. Technology systems impact workflow, efficiency, expectations, safety, communication, connectivity and so many other things."

### **Systems integration expertise**

Vendor-agnostic control system expertise is key to solving problems and delivering an optimized facility. Control system engineering and the ability to connect disparate systems are important to bridging gaps among the mechanical, electrical and security contractors—ensuring proper functionality of the various systems. Control integrators are critical players in the facility landscape, increasing their value beyond the initial project and ongoing maintenance processes.

"There are system integration opportunities that exist today that could never successfully be realized in the past," Montgomery adds.

### **Continued commissioning and service mindset**

Continuous monitoring and maintenance of facility systems is key to maintaining a "first-call" position with facility owners. The ability to collect and analyze data to help prevent and solve problems is an important core competency that allows stakeholders to derive actionable insights from the massive amounts of

data that too often go unused.

In a recent CBRE report, Matthew Eastwood states, "You can measure a million different things—but focus on what you want to control and do it differently." The ability to collect and analyze data also permits service providers to communicate both proactive and reactive solutions to a facility manager or subcontractor. These teams can then act on-site to troubleshoot the identified issue with purpose, avoiding potential problems and solving issues faster as they arise.

### **Who has the expertise and skill sets?**

The landscape of true technology experts and smart facility providers is not always obviously identified. The unique combination of skill sets needed to bring all of this expertise together currently sits in various places within the broader industry landscape. As time goes on, the skilled leaders will further emerge, and increased consolidation will likely occur. The early leaders able to build a large base of loyal clients will benefit the most. This evolving competitive landscape will impact industry stakeholders differently:

#### **Engineering firms**

Traditional MEP design and consulting engineering firms have varying depths of technology practices—from zero to extremely advanced. Those firms that are more deliberate in developing technology design and integration capabilities across key end markets are more likely to enjoy a stronger competitive position.

"Today, building occupants across all asset types expect 24/7 connectivity and a positive user experience," says Val Loh, principal at Syska Hennessy Group. "That's why we view our capabilities in technology design as a core component of our services rather than as a specialty add-on. Because our technology practice is fully integrated into our team structure, we can offer our clients a form of holistic design that differentiates us from other engineering firms."

#### **Original Equipment Manufacturers (OEMs)**

Skilled controls professionals inside OEM organizations are a recognized talent pool in the industry. The difference between an OEM representative and a controls engineer from a product-agnostic firm is the knowledge and ability to integrate one specific product type (as opposed to taking a broader view). As more systems and users move toward open systems not tied to a single product provider, the value assigned to the expertise and ability to work with multiple systems will increase. This will likely pressure the OEM providers to broaden expertise and/or further utilize product-agnostic service providers to execute the integration.

#### **Facility managers**

Certain facility managers possess the skill sets needed to optimize building systems, but they're focused on responding to problems and fixing tangible issues. Utilizing well-designed technology with remote systems expertise, analysis and support from technical service providers, on-site facility managers who live and work with the equipment every day can truly maximize the performance of the buildings they manage.

#### **IT managers**

As new technology is integrated into buildings and facilities, and as equipment becomes further integrated, greater reliance and power have shifted to IT managers. IT managers are increasingly the gatekeepers for critical facility system decision-making and troubleshooting. The role of IT staff and the accompanying core information technology knowledge is a key component of today's properly functioning facility.

As a result, the IT staff is a group that is likely to see an increased share of responsibility among facility stakeholders. Montgomery states, "Additionally, many traditionally managed systems (i.e., building automation systems) are now being

managed and operated by IT personnel as these systems become more data-driven. Organizations/companies desiring to truly separate themselves from the competition are pushing for greater levels of technology and often hiring the professionals that plan/design such systems independent from traditional MEP engineers.”

Talented practitioners skilled in the design, integration and ongoing technical services of the technologies embedded in today’s facilities are in high demand. The ability to find, retain and train an optimal talent base is hampered by the specialized skill sets spread among these disparate providers. In addition to having a fragmented talent pool, the competition for talented engineers is intense as the technology giants continue to grow. Engineering talent with three to seven years of experience is more valuable than ever, and acquiring such talent is a critical obstacle in building the best facility technology teams.

**The acceleration of growth in technology spend**

Technology is expanding as a component of overall building investment. This trend offers providers value through revenue diversification from the more traditional design segments and can offer improved margins for those increasingly commoditized firms.

A recent energy efficiency survey by Johnson Controls clearly identifies the expected growth in technology-enabled facility systems and integration (Exhibit 1). Sixty-eight percent of respondents plan to invest in building controls over the next 12 months, up from only 38 percent of respondents two years ago, exceeding Johnson Control’s expectations. Survey results show that six of the eight top measures that organizations plan to implement in the next 12 months relate to connected technological building systems requiring specialized design and integration. This trend highlights the significant growth opportunities available to engineering firms in the technology market.

*This article was originally published in the FMI Quarterly. FMI Corp. is a Raleigh-based management consultancy and investment banker dedicated exclusively to engineering and construction, infrastructure and the built environment.*

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# Ft. Bragg: More than \$1 billion to be spent for current and planned construction projects through 2024

North Carolina Construction News staff writer

Fort Bragg representatives have offered promising news for the region's construction industry, saying there are more than \$1 billion in current and planned construction projects at the base through 2024.

Speaking at a Regional Land Use Advisory Committee meeting in Fayetteville on Nov. 15, base representatives outlined in detail the current and planned projects.

The Department of Defense currently has more than \$343 million worth of projects under construction on the base, and another \$699 million in construction has been projected for the next six years, the Fayetteville Observer reported.

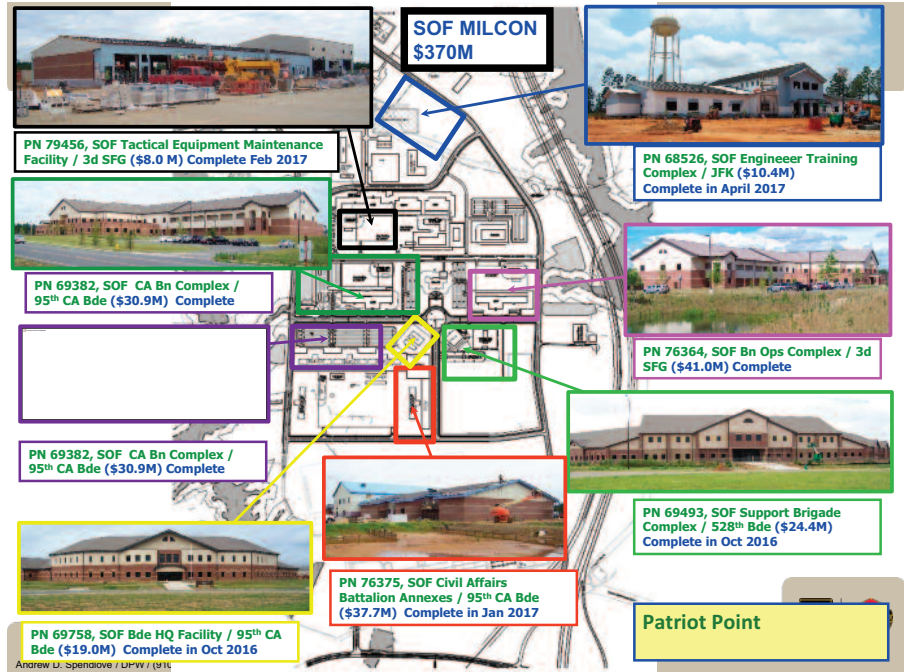
"It's continuing to grow every year," said Andrew Spendlove, chief of the master planning division at the Fort Bragg Directorate of Public Works.

## View the Fort Bragg RLUAC report

Planned projects is the GFF Architects-designed Freedom Crossing at Fort Bragg, a LEED-certified entertainment and retail district for service members and their families. The \$27-million project will include three retail buildings totaling 40,000 sq. ft., a 42,000-sq.-ft. movie theater and an outdoor public entertainment and event plaza, according to the report.

Fort Bragg's "wish list" of 24 possible future projects includes \$788 million worth of construction, including a fire station, airfield upgrades, tactical equipment maintenance facilities, barracks, infrastructure, and training areas.

Here is a list of current projects and overall spending projections through 2024.



## PROJECTS UNDER CONSTRUCTION

Project No.	Project Title	Cost
79437	SOF Training Command Bldg/SWCS	\$44.6 million
69302	SOF Battalion Ops Facility/3d SFG	\$39.3 million
76513	SOF Special Tactics Facility, PH II	\$28.3 million
80773	SOF Battalion Ops Facility/3d SFG	\$33.0 million
TMKH003003	SOF 21STS Ops Facility	\$15.2 million
74813	SOF Parachute Rigging Facility/SWCS	\$18.0 million
76514	SOF Special Tactics Facility, PH III	\$34.9 million
80037	Aberdeen Trng Facility Infrastructure	\$3.0 million
63850	SOF Battalion Administration Fac	\$12.2 million
89035	Bldg H2313 SAR Renovation	\$2.3 million
87604	SOF Truck Inspection Point	\$2.7 million
79439	SOF Advance Skills Training Fac	\$25.0 M
	AAFES Entertainment Complex	\$84.7 M

Projected projects through 2024 include:

Year	Project Category	Total	Total for Year
FY 18	Special Ops MILCON	\$49.7 Million	\$49.7 million
FY 19	AAFES Major Const	\$4.5 million	
FY 19	NAF Major Const	\$9.0 million	
FY 19	Special Ops MILCON	\$43.9 million	\$48.4 million
FY 20	AAFES Major Const	\$6.9 million	
FY 20	Special Ops MILCON	\$180.7 million	\$187.7 million
FY 21	AAFES Major Const	\$8.9 million	
FY 21	Special Ops MILCON	\$52.8 million	\$61.7 million
FY 22	Regular MILCON	\$8.1 million	
FY 22	Special Ops MILCON	\$168.7 million	\$176.8 million
FY 23	Special Ops MILCON	\$69.7 Million	\$ 69.7 Million
FY 24	Regular MILCON	\$ 4.1 Million	
FY 24	Special Ops MILCON	\$ 101.2 million	\$105.3 million



# Recognizing community service and leadership

*North Carolina Construction News special feature*

Here's our listing of North Carolina's top 10 home-building industry leaders for 2018. In compiling this list, we've considered each business's scale and size, but also evaluated community and association service leadership, as well as years in the industry. The list encompasses builders, suppliers and consultants.

While every name on this list deserves to be here, the names are ranked alphabetically, so you should not assume any hierarchy in the listed business leadership accomplishments.

## **Builders Mutual Insurance Co., Raleigh**

This insurance company focuses on commercial construction projects (especially residential developments) and so is a vital contributor to the North Carolina home building industry. Its leaders accordingly engage with relevant associations. The business traces its roots to 1986, when The North Carolina Home Builders Self Insurers Fund grew out of the North Carolina Home Builders Association (NCHBA) to provide affordable workers' compensation coverage to its members.

## **Clearlight Glass and Mirror, Kernersville**

Clearlight provides high-quality custom glass products, from unique OEM solutions to specially-measured and designed frameless showers. See more detailed information in our profile on page 10.

## **Evans Coghill Homes – Charlotte**

This successful builder traces its roots to charity. Partners Chris Folk and Alan Banks met as volunteers on a Habitat for Humanity project in 2001. The community service and leadership continues more than 15 years later. The company won recognition as Charlotte Home Builder of the Year in 2016, and Banks has served in 2018 as the NCHBA's president.

"I truly believe that the work we do positively changes lives and families, and strengthens the fabric of our community. We make a difference each and every day," Banks said. "Whether you are hammering nails, digging footings, hanging drywall, or running wire... whether you are a banker, an insurance agent, or a sales consultant, you are part of this great and necessary industry."

## **Herrington Classic Homes LLC, Wrightsville Beach**

The company's owners, husband-and-wife Craig and Mary Johnson, have more than 30 years of home building experience, and have taken the lead in contributing to the Wilmington area, where they build custom homes.

## **Niblock Homes, Concord**

This Charlotte-area company has constructed more than 35,000 homes since it opened its doors in 1979. The founding partners started the organization with values to "do business with a sense of stewardship and respect."

"We strive to create an atmosphere of trust so that we will always be proud to put our name on every home we build," the company says. And in living by that motto, the business has thrived for nearly four decades.

## **Piedmont Natural Gas**

Piedmont Natural Gas, now a part of Duke Energy, provides extensive support and co-ordination for new home builders and developers. The company's community spirit is reflected in its community relations managers, "who work in every city across our service territory to promote economic development and to represent the interests of our customers, our communities and our business partners."

## **Piedmont Wholesale Products, Greensboro**

Piedmont Wholesale Products' president Phil Warrick has been recently installed as the 2019 NCHBA president, indicating the company's on-going contribution to the home building community, both locally and statewide. The business, established in 1988, has 15 employees.

## **Upright Builders Inc., Cary**

Triangle-area Upright Builders traces its roots to 1987. The company has grown by building quality custom homes in many of the Triangle's best neighbourhoods.

The company says its staff provides attention to detail from the planning stages through construction and beyond. Upright builds on a "solid foundation" of integrity, honesty, knowledge and accountability. Employees strive to form lasting positive relationships with their clients while maintaining an excellent community reputation.

## **The Veritas Group, Kernersville**

This family-owned Triad-area custom builder has been building homes for more than three generations. The company focuses on detail, quality construction and value, and has earned several client testimonials for its work.

## **Windsor Homes, Greensboro**

This local builder has built a reputation for client satisfaction. While the phrase can be over-used, Windsor Homes can point to independent surveys which indicate that more than 99 percent of the company's clients would recommend it to a friend or family member. "We feel a homeowner referral is the best and highest compliment we can receive," the company says.

# Clearlight Glass & Mirror fabricates custom glass projects for builders and designers



*North Carolina Construction News special feature*

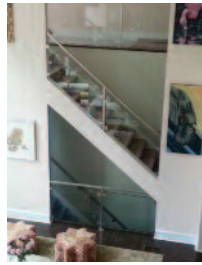
Clearlight Glass & Mirror was founded in 1994 by a glass artisan with intimate knowledge of glass machinery. Beginning with the finest Italian machines to fabricate glass, the company continues to provide high-quality custom glass products, from unique OEM solutions to specially-measured and designed frameless showers.

Clearlight's team of skilled workers runs weekly and bi-weekly delivery trucks throughout North Carolina, from west of Winston-Salem to the coast, and from south of Charlotte in South Carolina to Richmond, Virginia Beach, Chesapeake, Norfolk and beyond. Product is also shipped across the country.

Company president William Calhoun says the company's OEM projects are exciting. "We fabricate glass to tight tolerances for our customers, including our partner for Ford, Audi and Subaru auto shows—making everything from glass tiles on which the cars drive to glass railings for unobstructed views of the cars."

Other OEM work includes glass inserts for high-end residential front doors, colored glass for custom-made fireplaces and glass panels for machinery manufacturers. "We also create etched glass signage and display cases





for the hospitality, restaurant and retail industries, which includes beautiful plaques for donor walls and sophisticated office signage and we install custom glass showers measured to suit, largely frameless and semi-frameless showers. Installation also includes mirrors for residential and commercial customers.”

Precision equipment ensures tight tolerances to 1/32 of an inch for applications requiring exactness. Calhoun says the team works hard to provide customers with unique, high-quality products delivered in a timely fashion.

Clearlight’s team includes a production manager and sales manager with more than 40 years of combined experience. Employees apply their deep knowledge of glass for clients ranging from high-end home builders, to manufacturers with glass component parts, retail glass companies, designers and architects.



Calhoun says his team provides reliability and a quality guarantee.

“For builders, the same employee who measures your shower or mirror will perform the installation,” he says. “As a result, he is invested in measuring accurately and completely. Additionally, we are able to help with designs for etching and for complicated glass applications, such as restaurant countertops and kitchen counters.”

Calhoun says Clearlight will be doubling its production facility’s size this year, adding additional quality machinery. “Most importantly, we are adding a large tempering oven with the capability to temper large pieces of glass up to 86 in. by 144 in. and in thicknesses from 1/8 in. to 3/4 in. This will allow greater control of the fabrication process and improved quality control.”

Clearlight is a member of the Home Builders Association of Winston-Salem, the Greensboro Builders Association, the National Association of Home Builders and the North Carolina Home Builders Association.

For more information, visit [www.clearlightglass.com](http://www.clearlightglass.com).

At Clearlight Glass and Mirror we work one-on-one with our customers to fulfill their custom glass design needs. Our consultants understand each project has different technical challenges and we pride ourselves on our cost-effective and creative solutions.

We work with a variety of professionals, from engineers to builders and architects, to hospitality designers. Our unique and creative glasswork has been featured in restaurants, breweries, homes (particularly custom showers and railings), hospitals, showrooms, and trade-show exhibits. The earlier you involve us, the better your project will be!



1318 Shields Road, Kernersville, NC 27284  
Tel: 336-993-7300 [clearlightglass.com](http://clearlightglass.com)

# North Carolina's Safety Leaders: The Top 10 listed

*North Carolina Construction News special feature*

Safety has become a vital element for success in North Carolina's construction industry and the businesses and organizations in our Top 10 Safety list have earned their place through exceptional and comprehensive safety policies – converted to on-the-job safe practices.

We've used a variety of resources to determine the list, including participation in the Associated Builders and Contractors of the Carolinas (ABC)'s Safety Training Evaluation Program (STEP), which recently honored more than 100 members with awards at the association's annual Safety and Human Resources conference in Concord.

ABC says STEP participants lowered their total recordable incident rate by 87 percent compared to the industry average, an impressive achievement.

While it is an honor to be listed here, this list is not hierarchical – and many other companies could qualify. Accordingly, you should not read a ranking order into this list, and the list is alphabetical.

## **Centennial Contractors**

Based in Goldsboro, this contractor has worked for government agencies, institutions and private industries, always stressing the highest work quality.

The business has been recognized with an ABC Excellence in Safety award, Gold STEP award and Paragon Safety award.

## **Choate Construction Company**

Employee-owned Choate Construction has offices in Raleigh, Durham and Charlotte, providing general construction, management and consulting services.

The business has a OneLife identity safety program with a logo to remind everyone that safety must be top of mind. Choate received an ABC Gold STEP award, and the com-

pany has been accepted into this year's North Carolina Building Star program.

## **Crowder Construction Company**

Crowder Construction have been in business for 70 years. This general contractor also provides clients with industrial construction and energy services. Projects range from bridges, dams, water and waste water treatment, to civil transportation and public utilities infrastructure.

Crowder received a 2017 Gold Safety Achievement Award from the North Carolina Department of Labor, and a Carolinas Associated General Contractors (CAGC) merit award Outstanding Safety Performance in the Heavy Construction Division in 2017. The company also received an ABC Gold STEP award.

## **Edifice**

Located in Charlotte, Edifice is one of the Southeast's most successful full service general contractors. The company completes often complex projects, including corporate offices, education, healthcare, retail, municipal, and seniors living. ABC has recognized the business with a Platinum STEP award.

## **Eldeco**

Eldeco specializes in electrical design and construction, with more than 45 years experience on many major retail, industrial and heavy construction projects.

The company employs staff certified in safety management by the American Society of Safety Professionals. Employees identify leading indicators to red-flag projects before safety problems become critical. Eldeco has received three Platinum STEP awards from ABC.

## **Precision Concrete Construction**

The American Society of Concrete Contractors (ASCC) has recognized this business with Lost Time, Improvement, Recognition and Fleet

awards in 2018, and it has earned an ABC Gold STEP award. The business has a safety incentive program and sends a specialized safety training van to its job sites.

## **Precision Walls**

Precision Walls of Raleigh and Carey has created a construction safety program with help from the Occupational Health and Safety Administration (OHSA). The business has reduced trips, slips and falls, and its safety achievements have been recognized with an ABC Platinum STEP award.

## **Scaffolding Solutions**

This company has been in business since 2002, offering all type of custom scaffolding as well as elevators, hoists, lifts, platforms and shoring for any type of construction project, big or small.

See story page 13.

## **Tab Premium Built Homes**

The inaugural Builders Mutual Insurance Company Safety Program of the Year Award went to this company, a member of the Home Builders Association of Craven & Pamlico Counties. Tab Premium Built Homes has implemented comprehensive safety programs with mandatory safety meetings, personal protective equipment enforcement, and other safety measures.

## **WB Moore Electrical Contractors**

This Charlotte-based contractor has won the Construction Safety Excellence Awards for a specialty contractor for seven consecutive years and the North Carolina Department of Labor award for 10 consecutive years. The employee-owned company has been in business since 1989.

WB Moore focuses on continuous safety training and has been recognized with an ABC Platinum STEP award.

# Scaffolding Solutions achieves exceptional safety record with full-service elevated work platforms



*North Carolina Construction News special feature*

Scaffolding Solutions, in business since 2002, is a full-service scaffolding engineering firm providing fully erected, turnkey elevated work platforms for all type of construction projects.

The company works on new as well as restoration projects, shipyard staging applications for ship repair, and industrial operations of all types. Whether it is a government building, military base, educational or medical facility or any other type of commercial or industrial project, the business will erect exactly what is

needed, says company president Roger Jetton.

The business has North Carolina offices in Charlotte and Greensboro, as well as locations in Charleston, SC and also in Richmond, Manassas and Chesapeake, Virginia.

The company's professional erectors will erect the scaffolding a customer needs and then dismantle it at the end of the project. They have the most advanced scaffolding systems available, with local professional crews that can respond quickly to customers, especially in emergency situations.

Scaffolding Solutions has worked on many complicated and challenging projects over the years. One example is the Trinity Dome Project in Washington, DC in 2017.

Jetton said safety is critically important. He said the organization has not had a lost-time accident in two years and 11 months and their EMR (experience modification factor) is .77. "We are very proud of our safety record," he said.

The company focuses on an individual behavioral-based safety approach. All workers know they can call "time out" if they believe there is



a safety issue on the job. Every element of training and work is focused on safety.

Jetton said that safety has evolved over time and employees have been able to take their safety standards to a much higher level. Certain projects have demanding scaffolding installation elements. Supervisors assess job hazards every morning and supervisors review those hazards with crews before any work is started.

The safety focus is driven by the desire to protect good, hardworking employees, Jetton says. Incorporating best safe-work practices in every worker task, Scaffolding Solutions has minimized worker injuries and risks.

Safety recognitions include the BB&T insurance company Lighthouse Beam Safety Recognition Award in 2017, reflecting a workers' compensation loss ratio of 10 percent or less. At least 75 percent of Scaffolding Solutions' employees re-



ceive Industrial Safety Readiness Training (ISRT) certificates each year, resulting in the Gold Level award from The Virginia Manufacturer's Association.

In addition, Scaffolding Solutions received the National Scaffold and Access Industry Association's (SAIA)'s 2017 Collaborative Commer-

cial Project of the Year award. The SAIA project award was based on the innovative scaffolding and construction hoist installation at the Basilica Church in Washington, D.C., the largest Catholic church in North America, done with 30,000 man-hours of work with zero safety incidents.

Scaffolding Solutions employs in-house safety managers as well as independent safety consultants to constantly review best practices and audit worker safety.

One best-practice example is the company has adopted the use of self-retractable dual lanyards at all work sites. The lanyards have a much shorter stopping time and are much safer than standard ones, Jetton said.

For more information see <https://scaffoldingolutions.com/north-carolina>.




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**Charlotte approves \$110 million for convention center expansion**



Charlotte City Council has approved a \$110-million plan to expand and renovate the Charlotte Convention Center, the Charlotte Observer has reported.

The project will add 93,000 sq. ft. of space along Stonewall St. Plans include 15 new meeting spaces with movable walls and a pedestrian bridge across Stonewall St. connecting the center to the Novel apartment and retail development, as well as the Blue Line light-rail station and the 700-room Westin Hotel.

Holder-Edison Foard-Leeper Co. has been selected as construction manager for the project, while TVS North Carolina will provide architectural services.

Construction is expected to start next year and would run through 2020.

**UNC Rex Healthcare to build \$65 million Raleigh cancer center**

UNC Rex Healthcare has announced a \$65 million project to build a new cancer center next to the main hospital in Raleigh.



Construction on the new four story, 145,000-sq. ft. structure is set to start in spring 2019 at the corner of Blue Ridge and Macon Pond roads.

The cancer center should open in late 2020.

"We believe our new cancer center will create a hub for oncology care for patients from across Wake County and Eastern North Carolina," UNC Rex president Steve Burriss said in a statement. "This center will provide a new home to care for more people who rely on us for treatment and support during a cancer diagnosis."

The four-story building is more than double the space currently dedicated to cancer care on the Rex Hospital campus, officials said.

**Developers plan \$30 million north Charlotte project with five-story hotel, commercial space**

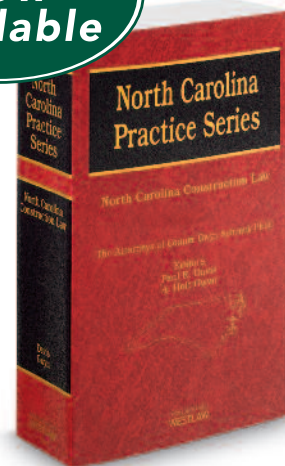
Construction on a \$30 million project in north Charlotte should start in the first quarter of 2019, the Charlotte Business Journal reports.



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That project will meld retail and hospitality, with plans calling for a five-story, 125-room hotel and 29,600 sq. ft. of commercial space for retail and fast-casual restaurants, says Trent Gustafson, president of Gustafson Partners Commercial Real Estate.

The project achieved rezoning approval in November.

"We've been pursuing this tract of land for a number of years," Gustafson says. "That intersection is ground zero for the Northlake Mall trade area."

### Frank L. Blum starts work on Salemtowne retirement community

With \$39 million in state-approved revenue bonds, Frank L. Blum Construction has started work on The Woodlands, a new residential living retirement community in Salemtowne.

There will be two four-floor buildings including 56 one- and two-bedroom villas ranging from 1,215- to 1,875-sq. ft. Each building will have seven residences per floor and an underground parking deck, The Winston-Salem Journal has reported.

The average cost for an apartment is \$325,000 and the project should be completed by late 2019 or early 2020.

### EGGER breaks ground for new manufacturing plant in Linwood

EGGER, one of the world's leading wood-based materials suppliers for the furniture, wood construction and flooring industries, has started construction on its first U.S. manufacturing plant at the I-85 Corporate Center in Linwood.

Construction on the production facility began after the North Carolina Department of Environmental Quality issued an air quality permit, The Dispatch says.

In July 2017, Austrian-based company, announced it was putting its first North American facility in Davidson County, promising a \$700 million investment and 770 jobs.



This ultramodern particleboard manufacturing plant is estimated to open in 2020 and will enable EGGER to better serve its customers in North America, improving access for architects, designers, wholesalers and furniture industry customers to EGGER's wide range of wood-based products and designs.

### ADW wins contract to design new Aberdeen police facility

The Town of Aberdeen has approved a \$368,000 contract with Charlotte-based architectural firm ADW to provide design services, prepare the bid documents and oversee construction administration for the new police facility.

The new facility is expected to cost \$4.2 million, while the construction of the building would take up to 12 months, The Pilot reports.

The new almost 13,000-sq. ft. building would house all the conventional police operations, including a detention area, evidence room, interview rooms and holding cells, a conference room, and offices.

Plans call for the existing 5,230-sq. ft. building to be used for things such as locker and shower rooms, a fitness room, a training room that could be available to outside groups and general storage.

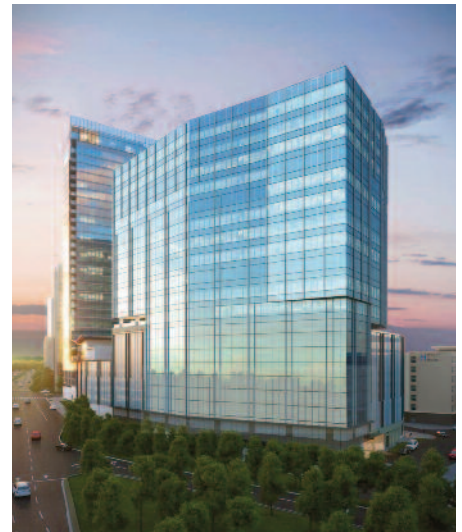
### Kane Realty to build 20-story office building in Raleigh

Kane Realty Corp. is preparing to begin construction of a 20-story office building in Raleigh's Midtown district.

The company has secured about an \$84.7 million construction loan to build the building, Tower IV. The 326,600-sq. ft. office project will rise 18 stories at 4000 Front St. within

the North Hills mixed-use development.

The building will have office accommodations above an eight-story as well as will feature 880-space parking deck and around 8,200 sq. ft. of ground-level retail space.



Adjacent will be a 570,000-sq. ft. residential tower rising 32 stories. The building will have 10 levels of boutique hotel rooms and 22 levels of luxury apartments.

Construction is expected to be completed in summer 2020.

### Lane Construction wins \$346 million road construction contract

Lane Construction Corp., a subsidiary of Salini Impregilo Group, has won a \$346-million design-build contract in Wake County to make improvements to I-440/US 1 from south of Walnut St. to north of Wade Ave.

Improvements to the interstate, referred to locally as the Raleigh Beltline, will widen 6.5 miles of the roadway from four lanes to six, enhancing traffic flow, access, and efficiency to the widely traveled roadway which is forecast to increase in traffic volume in the future.

The work involves replacing pavement and bridges and upgrading interchanges and is expected to start in early 2019 and be completed by mid-2023.



**PHCCNC installs 2019 board**

The Plumbing Heating Cooling Contractors of North Carolina (PHC-CNC) recently installed its 2019 board of officers and directors.

They are: Don Hilderbrand, director; Rob McClintock, president; Jeff Voss, vice-president; Thomas Barbour, director; Isiah Oxford, director; Rick Whitaker, treasurer; Lauren Acosta Huckleberry, director and Brooks Jester, associate director.

Dale Dawson issued the oath to new board members.



**NC Labor Commissioner Cherie Berry to speak at NCSA's Jan. 17 meeting in Charlotte**

Cherie Berry, North Carolina's Commissioner of Labor, will be the



guest speaker at the North Carolina Subcontractors Alliance (NCSA) meeting on Jan. 17 in Charlotte.

"Berry will be discussing safety and laws governing the construction industry," the NCSA says in its event announcement. There will also be display tables from safety and insurance company representatives.

The event will be from 5:30 to 7:30 p.m. at the Crowne Plaza Charlotte Executive Park, 5700 Westpark Dr.

Tickets include two drink tickets, dinner and speaker. There is an option to order a full table of eight and individual tickets. For more information and to register, visit the registration page here.

If you are interested in being a safety sponsor, call Michelle Frankum at (704) 965-7370.

**Linda Burkett retires after 30 years with ASAC**

Linda Burkett says she will be retiring Dec. 31 after three decades of service with the American Subcontractors Association of the Carolinas (ASAC).



In her retirement letter, she described several of her contributions to the association.

"In June, 2019 ASAC will celebrate "Fifty Years" of service to the construction industry," she wrote. "I consider it a privilege to have served 30 of those 50 years and it has most definitely been an honor to serve as your executive director. Thank you for your valued support and friendship."

**Sewage spillage in Raleigh's streams and tributaries underscores need for more public infrastructure funding: CAGC**

More than seven million gallons of sewage spilled into Raleigh's streams and tributaries in mid-November. This chilling occurrence underscores the need for more public funding to adequately address the importance of keeping pace with water, sewer and other infrastructure needs throughout the Carolinas, according to Carolinas Associated General Contractors (CAGC).

"More focus needs to be placed on repairing our water and sewer lines, as well as all public infrastructure needs, at a time when they are not being adequately addressed throughout the Carolinas and our nation," said Dave Simpson, the associ-

ation's president and CEO. "These incidents unfortunately will not go away if we do not keep pace with maintaining and improving all of our infrastructure needs."

According to news reports, the City of Raleigh repaired only 17 miles of sewer and water pipe last fiscal year. The Public Utilities Department requested a 3 percent increase in water and sewer rates to help repair 24 miles of pipe. The City Council voted to raise rates by 1.6 percent. With 7 million gallons of sewage spilling into four Raleigh streams and tributaries, including nearly 5 million gallons of sewage spilling into Marsh Creek, more needs to be invested in the water and sewer system.

AGC of America Utility Infrastructure Division director Allen Gray said in a statement: "This is an unfortunate but telling example of how important investing in our deteriorating water/waste water infrastructure is. The problem is national, but especially critical in areas experiencing the growth seen in Raleigh and throughout the Carolinas. It is imperative to our health, environment and business development to fully fund safe, adequate and dependable water/waste water infrastructure."

**AIA Charlotte announces 2018 Design and Service award winners**

AIA Charlotte recently hosted the 2018 Design & Service Awards Gala at the Bechtler Museum of Modern Art.

Fourteen projects received awards. Design projects were selected by a jury of architects from Tennessee, chaired by **John L. Sanders**, FAIA, of Sanders Pace Architecture. Service award recipients were nominated by their peers and selected by a jury of local AIA Charlotte architects.

For the list of winners, visit [https://cdn.ymaws.com/www.aiacharlotte.org/resource/resmgr/design\\_awards/2018/2018\\_design\\_awards\\_winners\\_a.pdf](https://cdn.ymaws.com/www.aiacharlotte.org/resource/resmgr/design_awards/2018/2018_design_awards_winners_a.pdf)

# An invitation: Current safety updates and trends



North Carolina's labor commissioner Cheri Berry is the featured speaker at the upcoming North Carolina Subcontractors Alliance (NCSA) meeting in Charlotte on Jan. 17.



She will speak about her greatest priority – safety – and update members and guests about current safety updates and trends.

Tickets are available at  
<http://ncsubcontractors.com/events/>

Thursday, Jan. 15, 2019, 5:30 to 7:30 p.m.  
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Cindy McMahan, 803-814-3753

**Additional Information:**  
Stutts & Williams, LLC will provide links to plans and specifications based on inquiries.

Subcontract values greater than \$500,000 may require bonding unless subcontractor can provide adequate past experience and financial information to waive bonding requirement.

Stutts & Williams, LLC requests pricing be submitted to us by COB, January 3, 2019.

Questions & proposals can be sent to [joey@stuttswilliams.com](mailto:joey@stuttswilliams.com).

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